In the Claims

1. (Previously Presented) An automatic gain control (AGC) circuit, comprising:

an input port for receiving an input signal that is one of a digital input signal and an analog input signal;

a comparator coupled to the input port for determining which of the digital input signal and the analog input signal has been received;

an averager for averaging the digital input signal to generate an average voltage signal when the input signal is determined to be digital;

a peak detector for generating a peak voltage signal from the analog input signal when the input signal is determined to be analog; and

an output port for providing the average voltage signal when the input signal is determined to be digital and for providing the peak voltage signal when the input signal is determined to be analog.

2. (Previously Presented) The AGC circuit of claim 1, wherein the comparator comprises:

a first input for receiving the input signal;

a second input for receiving a reference voltage; and

an output for providing a control signal indicating which of the digital input signal and the analog input signal has been received.

3. (Previously Presented) The AGC circuit of claim 2, further comprising:

a thermally compensated reference voltage circuit for generating reference voltage levels under control of the comparator.

4. (Previously Presented) The AGC circuit of claim 3, wherein the thermally compensated reference voltage circuit generates a digital reference voltage level when the input signal is determined to be digital, and wherein the thermally compensated reference voltage circuit generates an analog reference voltage level when the input signal is determined to be analog.

5. (Currently Amended) The AGC circuit in claim 1, further comprising:

an integrator coupled to ~~the~~ **a** thermally compensated reference voltage circuit for comparing the average voltage signal with the digital reference voltage level when the input signal is determined to be digital and for comparing the peak voltage signal with the analog reference voltage level when the input signal is determined to be analog.

6. (Currently Amended) The AGC circuit of claim 1, further comprising:

a switch having first and second switch settings, wherein the switch is controlled by the comparator, wherein the first switch setting of the switch is activated when the input signal is determined to be digital and provides the average voltage signal to ~~the~~ **an** integrator, and wherein the second switch setting of the switch is activated when the input signal is determined to be analog and provides the analog input signal to the peak detector.

7. (Previously Presented) An amplifier having automatic gain control (AGC) circuit , the amplifier comprising:

at least one gain stage for amplifying a signal received by the amplifier, the gain stage comprising an input terminal and an output terminal;

an AGC circuit for controlling attenuation of the signal in the gain stage, wherein an input of the AGC circuit is coupled to the output terminal of the gain stage for receiving a pilot signal with a video signal component and an output of the AGC circuit is coupled to the input terminal of the gain stage for providing a level control signal thereto, the AGC circuit comprising:

a detector for demodulating the pilot signal to generate a demodulated signal;

a comparator for receiving the demodulated signal, wherein the demodulated signal is one of a digital signal and an analog signal, and for determining which of the digital signal and the analog signal has been received;

an averager for averaging the digital demodulated signal to generate an average voltage signal when the pilot signal is determined to be digital;

a peak detector for generating a peak voltage signal from the demodulated signal when the pilot signal is determined to be analog; and

an output port for providing the average voltage signal at the input terminal of the gain stage when the pilot signal is determined to be digital and for providing the peak voltage signal at the input terminal of the gain stage when the pilot signal is determined to be analog.

8. (Previously Presented) The amplifier of claim 7, further comprising:

a thermally compensated reference voltage circuit for generating reference voltage levels under control of the comparator.

9. (Currently Amended) The amplifier of claim 7, further comprising:

a switch having first and second switch settings, wherein the switch is controlled by the comparator, wherein the first switch setting of the switch generates a digital reference voltage level from ~~the~~ **a** thermally compensated reference voltage circuit when the pilot signal is determined to be digital, and wherein the second switch setting of the switch generates an analog reference voltage level from the thermally compensated reference voltage circuit when the pilot signal is determined to be analog.

10. (Previously Presented) The amplifier of claim 7, further comprising:

an integrator coupled to the switch for comparing the average voltage signal with the first switch setting when the pilot signal is determined to be digital and comparing the peak voltage signal with the second switch setting when the pilot signal is determined to be analog.

11. (Previously Presented) The amplifier of claim 10, wherein the integrator has an output to provide the level control signal.

12. (Currently Amended) A communication system for providing information, the communication system comprising:

a transmitter for transmitting a signal including the information;

a receiver for receiving the signal; and

an amplifier coupled between the transmitter and the receiver for amplifying the signal, the amplifier comprising:

a gain stage for amplifying the signal received by the amplifier; and

an automatic gain control (AGC) circuit for controlling the attenuation of the signal in the gain stage, the AGC circuit comprising:

an input port for receiving an input signal and an output port for providing an output signal; ~~and~~

a comparator for determining when the input signal is a digital input signal and determining when the input signal is an analog input signal ~~,~~ **; and**

a thermally compensated reference voltage circuit for generating reference voltage levels under control of the comparator,

wherein the AGC circuit automatically controls the attenuation of the signal in the gain stage when the input signal is digital and when the input signal is analog.

13. (Previously Presented) The communication system of claim 12, wherein the AGC circuit further comprises:

an averager for averaging the digital input signal to generate an average voltage signal; and

a peak detector for generating a peak voltage signal from the analog input signal.

14. (Canceled).

15. (Currently Amended) The communication system of claim ~~14~~ 12, wherein the thermally compensated reference voltage circuit generates a digital reference voltage level when the input signal is determined to be digital and an analog reference voltage level when the input signal is determined to be analog.

16. (Previously Presented) The communication system of claim 12, wherein the AGC circuit further comprises an integrator coupled to the thermally compensated reference voltage circuit comparing the average voltage signal and the digital reference voltage level when the input signal is determined to be digital and comparing the peak voltage signal and the analog reference voltage level when the input signal is determined to be analog.

17. (Previously Presented) The communication system of claim 16, wherein the integrator has an output to provide the output signal that controls the signal level.